

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~In a~~ A stator coil ~~which comprises;~~ comprising:
a plurality of segments received in a plurality of slots of a stator core and
serially connected with each other to construct each of which is received in stator core slots
~~having an even number of receiving positions in a radial direction, thereby constructing one~~
turn in a phase coil in M (integer greater than or equal to 3) phase ~~coils;~~ coils, said slots being
arranged along a circumferential direction of said stator core, and each slot having an even
number of receiving positions disposed along a radial direction of said stator core;
each of said segment-segments comprising: a pair of slot conductor portions
~~each of which is~~ are, respectively, received in two receiving positions ~~different with each~~
~~other in a~~ of a pair of slots distant by a prescribed ~~pitch;~~ pitch in said circumferential direction
of said stator core; a head portion which is projected toward an end of said stator core; and a
pair of projected end portions each of which is projected from another end of said stator core;
said head portion comprising: a U-shaped head tip portion; and a pair of head
oblique portions each of which is stretched obliquely along the ~~radial~~ circumferential and
axial directions of said stator core;
said pair of projected end portion-portions comprising: a pair of end oblique
portions each of which stretches obliquely along the ~~radial~~ circumferential and axial
directions of said stator core; and a pair of end tip portions each of which is formed at a tip of
said corresponding end oblique portion and is joined with an end tip of ~~different~~ said other
end tip portion,
~~characterized in that~~ wherein each of said head oblique portions ~~and or each of~~
said end oblique portions are ~~is~~ made circular-arch-shaped around an axis of said stator core.

2. (Currently Amended) The stator coil, according to claim 1,~~characterized in that wherein:~~

each of said slots receives at different receiving positions a plurality of segment sets ~~wherein and~~ a larger segment surrounds a smaller segment which is received at adjacent receiving positions;

a group of said segment sets received at the same radial positions and disposed along the circumferential direction forms a group of partial phase coils to which the same phase voltage is applied; and

said partial phase coils received at said adjacent receiving positions in a slot are sequentially connected in series, thereby forming said phase coil.

3. (Currently Amended) The stator coil according to claim 2,~~characterized in that wherein:~~

a group of slots along the circumferential direction receiving said segments to which the same phase voltage is applied is made a same phase slot group;

a plurality of series phase coil circuit made of said partial phase coils sequentially connected in series are formed in different slots in said same phase slot group; and

said series phase coil circuits are connected in parallel, thereby forming said phase coil.

4. (Withdrawn) In a method for manufacturing a stator coil which comprises the steps of:

preparing a plurality of segments each of which comprises a U-shaped head and a pair of parallel legs extending straight from said head;

preparing a plurality of relatively rotating rings disposed co-axially around an axis of said stator core;

holding along the axial direction end portions of said segments projected by a prescribed axial length from said slots;

bending by relatively rotating said rings said end portions obliquely against said axis; and

characterized in that said head portions are bent in order to form a circular-arch-shape around said axis of said stator core by using a cylindrical guide member of which outer circumferential surface touches during relatively rotating said rings said segments at the radial innermost circumference of said slots.

5. (Withdrawn) In a method for manufacturing a stator coil according to claim 4, which further comprises the steps of:

inserting said pair of parallel legs into a pair of slots distant by a prescribed pitch in a stator core; and

joining sequentially said legs adjacent in the radial direction, thereby completing said stator coil,

characterized in that said end portions projected from said slots are bent in order to form a circular-arch-shape around said axis of said stator core by using another cylindrical guide member of which outer circumferential surface touches during relatively rotating said rings said segments at the radial innermost circumference of said slots.

6. (New) A stator coil, comprising:

a plurality of segments received in a plurality of slots of a stator core and serially connected with each other to construct a phase coil in M (integer greater than or equal to 3) phase coils, the slots being arranged along a circumferential direction of the stator core, each slot penetrating through the stator coil in an axial direction of the stator coil between an inner circumferential surface and an outer circumferential surface of the stator core, and each slot

having an even number of receiving positions disposed along a radial direction of the stator core;

each of the segments comprising: a pair of slot conductor portions which are, respectively, received in two receiving positions of a pair of slots distant by a predetermined pitch in the circumferential direction of the stator core; a head portion which is projected toward an end of the stator core in the radial direction of the stator core; and a pair of projected end portions each of which is projected from another end of the stator core;

the head portion comprising: a U-shaped head tip portion; and a pair of head oblique portions each of which is stretched obliquely along the circumferential and axial directions of the stator core;

the pair of projected end portions comprising: a pair of end oblique portions each of which stretches obliquely along the circumferential and axial directions of the stator core; and a pair of end tip portions each of which is formed at a tip of the corresponding end oblique portion and is joined with an end tip of the other end tip portion,

wherein each of the head oblique portions or each of the end oblique portions is bent in the radial direction of the stator core in a bow shape not to go beyond the inner circumferential surface of the stator core.

7. (New) The stator coil according to claim 6, wherein the segments are composed of a plurality of segment sets disposed along the circumferential direction, each segment set is composed of a larger segment and a smaller segment, the two receiving positions of the pair of slot conductor portions of each smaller segment are adjacent to each other in the radial direction and are disposed in two slots distant by the predetermined pitch in the circumferential direction, each larger segment is received in the same slots as those of the corresponding smaller segment so as to surround the smaller segment in the radial direction, the segment sets connected with each other forms a partial phase coil to which a partial phase voltage is applied, another partial

phase coil or each of other partial phase coils to which the same partial phase voltage is applied is formed by other segments received in other receiving positions different from those of the segments in the radial direction, and each pair of partial phase coils adjacent to each other in the radial direction are connected with each other to form the phase coil from the partial phase coils serially connected with each other.

8. (New) The stator coil according of claim 7, wherein the segments of the partial phase coils serially connected with each other are received in a plurality of receiving positions of a same phase slot group which is composed of the slots disposed at equal intervals of the predetermined pitch in the circumferential direction, a serial phase coil circuit is made of the partial phase coils serially connected with each other, another serial phase coil circuit or each of other serial phase coil circuits is made of other serially-connected partial phase coils of which segments are received in a plurality of receiving positions of another same phase slot group which is composed of a plurality of other slots disposed at equal intervals of the predetermined pitch in the circumferential direction, and all of the serial phase coil circuits are connected in parallel, thereby forming the phase coil.